

## CLAIMS

### What is Claimed is:

1. A method of performing admission control of traffic flow in an information network, comprising:
  - determining a first effective envelope associated with arriving traffic entering said network;
  - 5 determining a second effective envelope associated with admitted traffic currently in said network;
  - determining a service curve by measuring departing traffic leaving said network; and
  - admitting said arriving traffic if the sum of the first and second global
  - 10 effective envelopes is less than or equal to said service curve.
2. The method of claim 1 wherein said first and second envelopes are global effective envelopes.
3. The method of claim 1 wherein said second envelopes is a global effective envelopes determined as a function of the measured average and variance of the aggregate traffic.
4. The method of claim 1 wherein said first and second envelopes are local effective envelopes.

5. The method of claim 1 wherein said second envelopes is a local effective envelopes determined as a function of the measured average and variance of the aggregate traffic.

6. The method of claim 1 wherein said first effective envelope is based on the aggregate of arriving traffic.

7. The method of claim 6 wherein said aggregate is determined by measuring an aggregate arrival flow at plural time intervals and by calculating the average and variance.

8. The method of claim 1 wherein and second effective envelope is recursively calculated.

9. The method of claim 1 wherein said service curve is determined based on measured packet delay.

10. The method of claim 1 wherein said service curve is determined by developing a list of pairs representing the amount of time required to service one packet of information and the number of backlogged packets of information and using said list to determine a bounded service envelope.

11. A method of performing admission control of traffic flow in an information system, comprising:

determining a first effective envelope associated with arriving traffic entering said network;

5 determining a second effective envelope associated with admitted traffic currently in said network;

determining a service curve by measuring departing traffic leaving said network; and

10 admitting said arriving traffic if the sum of the first and second global effective envelopes is less than or equal to said service curve.

12. The method of claim 11 wherein said information system is a multi-port switch.

13. The method of claim 11 wherein said information system is an autonomous network.

14. The method of claim 11 wherein said information system is a computer network domain.